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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/561,799	12/21/2005	Katsuhiko Oyama	33082M294	5867
441 7590 10/02/2008 SMITH, GAMBRELL & RUSSELL 1130 CONNECTICUT AVENUE, N.W., SUITE 1130 WASHINGTON, DC 20036			EXAMINER GERRITY, STEPHEN FRANCIS	
			ART UNIT 3721	PAPER NUMBER
			MAIL DATE 10/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/561,799

Applicant(s)

OYAMA ET AL.

Examiner

Stephen F. Gerrity

Art Unit

3721

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 December 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____
- Paper No(s)/Mail Date See Continuation Sheet

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :12/21/05, 4/5/06, 7/13/06, 11/14/07, 2/12/08, and 7/10/08.

DETAILED ACTION

Response to Preliminary Amendment

1. Receipt is acknowledged of a preliminary amendment, filed 21 December 2005, which has been placed of record and entered in the file.

Priority

2. Acknowledgment is made of applicant's claim for priority under 35 U.S.C. § 119. The certified copy has been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

Information Disclosure Statement

3. Receipt is acknowledged of Information Disclosure Statements, filed 12/21/05, 4/5/06, 7/13/06, 11/14/07, 2/12/08, and 7/10/08, which have been placed of record in the file. An initialed, signed and dated copy of each of the PTO-1449 forms is attached to this Office action.

Drawings

4. Figure 10 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title of the invention should be amended so that it is consistent with the claimed invention, and it is suggested that a description of an element of applicant's claimed invention which is considered a feature of novelty be added to the title of the invention.
6. The disclosure is objected to because of the misspelling of "hermetic" at page 4, line 18. Appropriate correction is required.
7. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 5-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In each of claims 5-7, the recitations "one space" and "the other space" render the claim vague and indefinite because of a lack of consistent terminology and/or a lack of proper antecedent basis.

In each of claims 5-7, the expression "in order to leisurely reduce..." renders the claim vague and indefinite because the term "leisurely" is ambiguous and subjective.

These and any other informalities should be corrected so that the claims may particularly point out and distinctly claim the subject matter which applicant regards as the invention, as required by 35 U.S.C. § 112, second paragraph.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 and 3/1 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima et al. (JP 2000-150613) in view of Tokunaga (US 2003/0031537).

The Matsushima et al. reference discloses a processing apparatus including a partition 12 between an inside (left-side fig. 5) and an outside (right-side fig. 5), a container 11 having a lid 15, an opening part provided in the partition 12 through which the two sides communicate, a door mechanism 33 that can close the opening part, a lid opening and closing mechanism 30, a driving unit 35, 36, 37 that moves the lid opening and closing mechanism 30, and a cover member 18 that defines a driving unit arrangement room. The Matsushima et al. reference meets all of applicant's claimed subject matter with the exception of the gas-discharging mechanism that discharges gas in the driving unit arrangement room. The Tokunaga reference discloses a similar type of processing unit including a gas-discharging mechanism 48 that discharges gas in the driving unit arrangement room between 27 and 46. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have

modified the Matsushima et al. processing apparatus to have included a gas-discharging mechanism that discharges gas in the driving unit arrangement room, as taught by Tokunaga, for the benefit of removing gas and dust from around the articles to be processed.

Regarding claim 3/1, the Matsushima et al. reference discloses a sealing member 13 provided around the whole circumference of an end edge of the opening part on a side of the outside space area, and that the lid opening and closing mechanism 30 is hermetically connectable with the sealing member by an action of the driving unit when closing occurs.

12. Claims 2 and 3/2 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of Otaguro (JP 2002-170860).

The Matsushima et al. processing apparatus, as modified by Tokunaga above, meets all of applicant's claimed subject matter with the exception of the inclined plane on the end edge of the opening part, and the door mechanism is movable in a plane direction of the partition. The Otaguro reference teaches that it is old and well known in the relevant art to provide an inclined plane on the end edge of the opening part, and that the door mechanism is movable in a plane direction of the partition. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Matsushima et al. process device by having replaced the Z-axis cylinder (21), which raises and lowers the isolation unit (18), and the cam groove (25), cam plate (26), cam roller (28), and X-axis cylinder (27), which enable

motion toward and away from the partition wall (12) of the isolation unit (18), with the mechanism provided with members having inclined surfaces which, when the members are raised and lowered with respect to each other, result in the inclined surfaces moving toward and away from each other, as taught by Otaguro, for the benefit of ensuring a tight closing of the door mechanism with the partition opening.

Regarding claim 3/2, the Matsushima et al. reference discloses a sealing member 13 provided around the whole circumference of an end edge of the opening part on a side of the outside space area, and that the lid opening and closing mechanism 30 is hermetically connectable with the sealing member by an action of the driving unit when closing occurs.

13. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1, 2 or 3 above, and further in view of Osada (JP 2002-357271).

The Matsushima et al. process apparatus, as modified by Tokunaga and/or Otaguro above {depending on the dependency of the claim}, meets all of applicant's claimed subject matter with the exception of the sealing member having a Y-shaped section, but the Osada reference teaches that it is old and well known to provide a sealing member having a Y-shaped section, as seen in fig. 7B, for enhancing a sealing area between two relevant members of a processing apparatus. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Matsushima et al. process apparatus, by having replaced the flat sealing member 13 with a sealing member having a Y-shaped section,

as taught by Osada, in order to enhance the sealing area between two relevant members of the processing apparatus.

14. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claims 1, 2 or 3 above, and further in view of Iwai et al. (JP 6-302679).

The Matsushima et al. processing apparatus, as modified by Tokunaga, Otaguro and/or Osada {depending on the dependency of the claim}, meets all of applicant's claimed subject matter with the exception of the pressure-adjusting mechanism in the door mechanism. The Iwai et al. discloses a similar type of processing apparatus in which it is shown to be old and well known to provide a pressure-adjusting mechanism, wherein an electromagnetic valve (148) is opened, thereby opening up two spaces and eliminating an air pressure difference there between. It would have been obvious to one having ordinary skill in the art, at the time applicant's invention was made, to have further modified the Matsushima et al. processing apparatus by having substituted pressure-adjusting mechanism in the form of the electromagnetic valve (148) disclosed in Iwai et al., in place of the purge port (38) and exhaust port (39) as the means for making the pressure in the isolation chamber (17) and transfer chamber (6) the same. Furthermore, a processing apparatus of the claimed variety, wherein the degree to which a valve is opened is controlled so as to regulate air currents in order to prevent the raising of dust due to air currents is a conventionally known device, and gradually opening the electromagnetic valve disclosed in Iwai et al. is merely a feature appropriately determined as needed by a person skilled in the art.

Conclusion

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references listed on the attached form (PTO-892) are cited to show processing devices. All are cited as being of interest and to show the state of the prior art.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephen F. Gerrity whose telephone number is 571-272-4460. The examiner can normally be reached on Monday - Friday from 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi Rada can be reached on 571-272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Stephen F. Gerrity/
Primary Examiner
Art Unit 3721

26 September 2008